METAPLANET

Discovery of A New Planet

Contents

Imagination often leads us to a world that never existed before. But without imagination you can't go anywhere.

Carl Edward Sagan, 1934 ~ 1996

1. Abstract

Uranus, a planet that was difficult to observe with the naked eyes because of its distance from Earth, is the 7th planet discovered in modern era and the 3rd largest planet in the solar system. In the universe of the ancients, the earth was at the center of the universe and seven celestial bodies revolved around it, and the zenith studded with stars on the outside. William Herschel, who pioneered the universe using a telescope designed by Galileo Galilei, later discovers a new slowly moving object in the sky, and this discovery leads to the surprising discovery of a new planet added to the solar system.

From the efforts of these pioneers we became to recognize the new things discovered by our great imaginations as not new or for granted, and reach the truth on a higher level.

Metaplanet is where a new perception free from spatial and temporal constraints begins by observing and testing with a new imagination the hyper-connected era called Metaverse, and by discovering and connecting each planet that is realized based on space and images we promise to evolve into a content platform to be recognized for its universal value.

We would like to provide you with a chance to take the first seat on our satellite to discover new planets and update the galactic map in the vast universe of Metaverse.
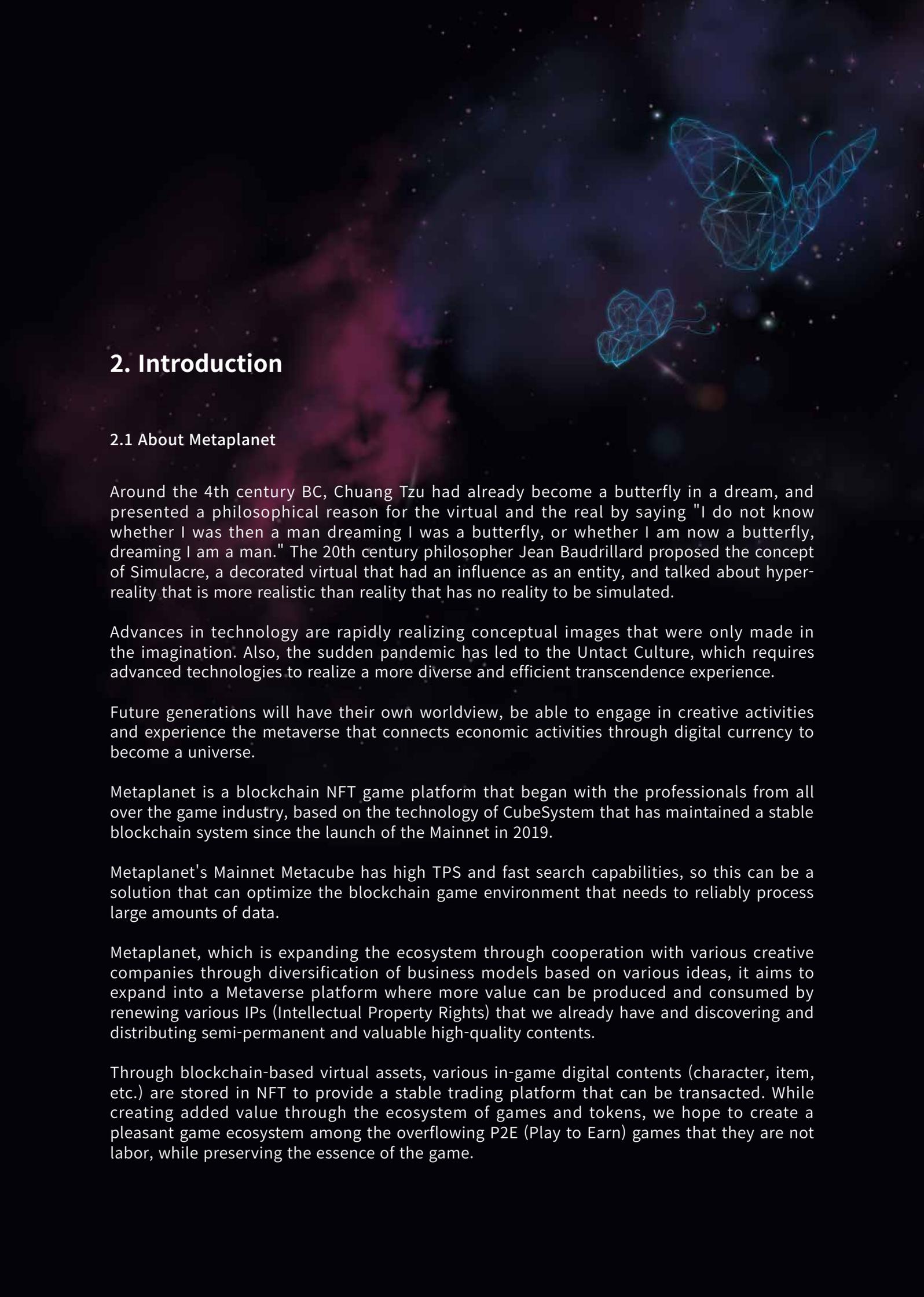
2. Introduction

2.1 About Metaplanet

Around the 4th century BC, Chuang Tzu had already become a butterfly in a dream, and presented a philosophical reason for the virtual and the real by saying "I do not know whether I was then a man dreaming I was a butterfly, or whether I am now a butterfly, dreaming I am a man." The 20th century philosopher Jean Baudrillard proposed the concept of Simulacre, a decorated virtual that had an influence as an entity, and talked about hyper-reality that is more realistic than reality that has no reality to be simulated.

Advances in technology are rapidly realizing conceptual images that were only made in the imagination. Also, the sudden pandemic has led to the Untact Culture, which requires advanced technologies to realize a more diverse and efficient transcendence experience.

Future generations will have their own worldview, be able to engage in creative activities and experience the metaverse that connects economic activities through digital currency to become a universe.

Metaplanet is a blockchain NFT game platform that began with the professionals from all over the game industry, based on the technology of CubeSystem that has maintained a stable blockchain system since the launch of the Mainnet in 2019.

Metaplanet's Mainnet Metacube has high TPS and fast search capabilities, so this can be a solution that can optimize the blockchain game environment that needs to reliably process large amounts of data.

Metaplanet, which is expanding the ecosystem through cooperation with various creative companies through diversification of business models based on various ideas, it aims to expand into a Metaverse platform where more value can be produced and consumed by renewing various IPs (Intellectual Property Rights) that we already have and discovering and distributing semi-permanent and valuable high-quality contents.

Through blockchain-based virtual assets, various in-game digital contents (character, item, etc.) are stored in NFT to provide a stable trading platform that can be transacted. While creating added value through the ecosystem of games and tokens, we hope to create a pleasant game ecosystem among the overflowing P2E (Play to Earn) games that they are not labor, while preserving the essence of the game.

2.2 The Metaverse Era and NFT

Metaverse

Started in 2016, the spark of the 4th industrial revolution has spread and developed rapidly the IoT, AI and virtual reality. As a result of a huge paradigm called the Metaverse, social and economic activities are expanding beyond games to include music, entertainment, contents and education.

Passing through Generations X and M, who were passionate about e-sports and MMORPG games, and Generation Z of mobile games, the Metaverse experience reached the Alpha Generation (2010-2024) and entered the environment of the living virtual world during the global pandemic. Modern people who show consumption characteristics that emphasize individual happiness rather than group, uniqueness rather than possession, and experience rather than goods, are accepting the Metaverse as an alternative as we seek a new space to express our atrophied desires and diversity in oppressed and limited situations.

The Metaverse ultimately maintains various activities in reality, and it can be seen as an environment that provides users with a sense of social and spatial reality and based on anonymous communication, breaking down economic constraints and satisfying a sustainable life are our core values.
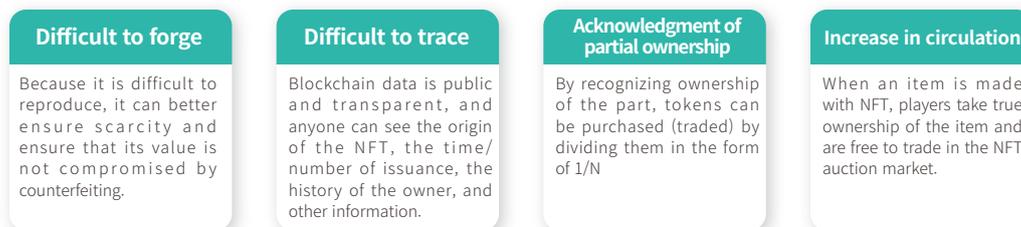
(Unit: 100 million USD)
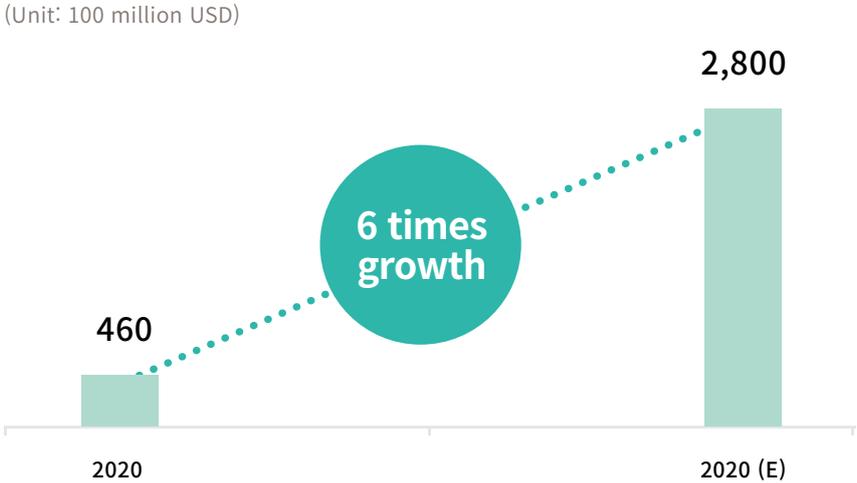
| Metaverse market size |

2.3 NFT

Non-Fungible Token

They are non-interchangeable tokens, and each is unique as a digital file on the blockchain that represents a specific asset. Because it is non-fungible, it can also be called a digital certificate with uniqueness and rarity. Once created, ownership, sales history, and date information are all stored in the blockchain, making it impossible to delete or forge, and all transaction details can be traced.

NFT was developed on a centralized server in the Web 2.0 era, where digital files could be copied indefinitely without degradation in quality, were allowed to create a business model that can incorporate various revenue models, and even can restore the right to data to individuals and bring ownership and use rights to the individual.

| **Difficult to forge**	**Difficult to trace**	**Acknowledgment of partial ownership**	**Increase in circulation**
Because it is difficult to reproduce, it can better ensure scarcity and ensure that its value is not compromised by counterfeiting.	Blockchain data is public and transparent, and anyone can see the origin of the NFT, the time/number of issuance, the history of the owner, and other information.	By recognizing ownership of the part, tokens can be purchased (traded) by dividing them in the form of 1/N	When an item is made with NFT, players take true ownership of the item and are free to trade in the NFT auction market.

| 4 advantages of NFT |

2.4 NFT market trend

2021 is the first year of NFT market growth

According to the NFT data analysis site NonFungible, the size of the NFT market (transaction value) on the Ethereum blockchain was only $36.76 million in 2018 and $66.83 million in 2020. However, from March of this year, NFT began to be known to the public, and as the demand for digital artworks, games, and community NFT increased, it has turned into a huge market with more than $4.31 billion in transactions by September.
On August 30, according to the cryptocurrency media chain news, Gartner, a US IT research institute, has added NFT to its list of 25 breakthrough technologies that will have a significant impact on business and society over the next 2 to 10 years through its official site, and stated "the sales of digital works based on NFT technology is one of the completely new monetization models, and the potential of NFT can create a whole new digital ecosystem.

In its own report, Gartner has identified that NFT technology is currently at a 'Peak of Inflated Expectations' in the hype cycle.

Billion dollars

**NFT transaction volume recorded
$2.5 billion in August alone**
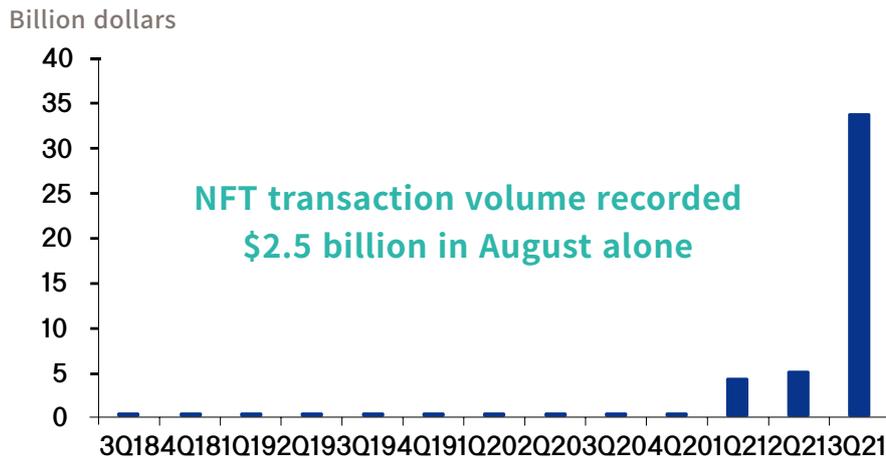
| Trend of NFT quarterly transaction amount |

3. IP Business

Newtro (the tendency to enjoy retro again) craze, which has established itself as a global trend, is being discovered in various ways in that it provides a new experience that has never been experienced before. It is solidifying its market value backed by the explosive growth of media platforms and OTT industries.

The expandability of the newtro theme provides infinite possibilities and significant ideas to the businesses using IP in a blockchain-based NFT ecosystem, where irreplaceable characteristic and ownership are guaranteed, that the game industry is expected to have the highest impact in particular.

With a long-term view, securing a global and unique IP and building a value chain by producing its own IP is probably the core tasks of the IP Business to expand its ecosystem.
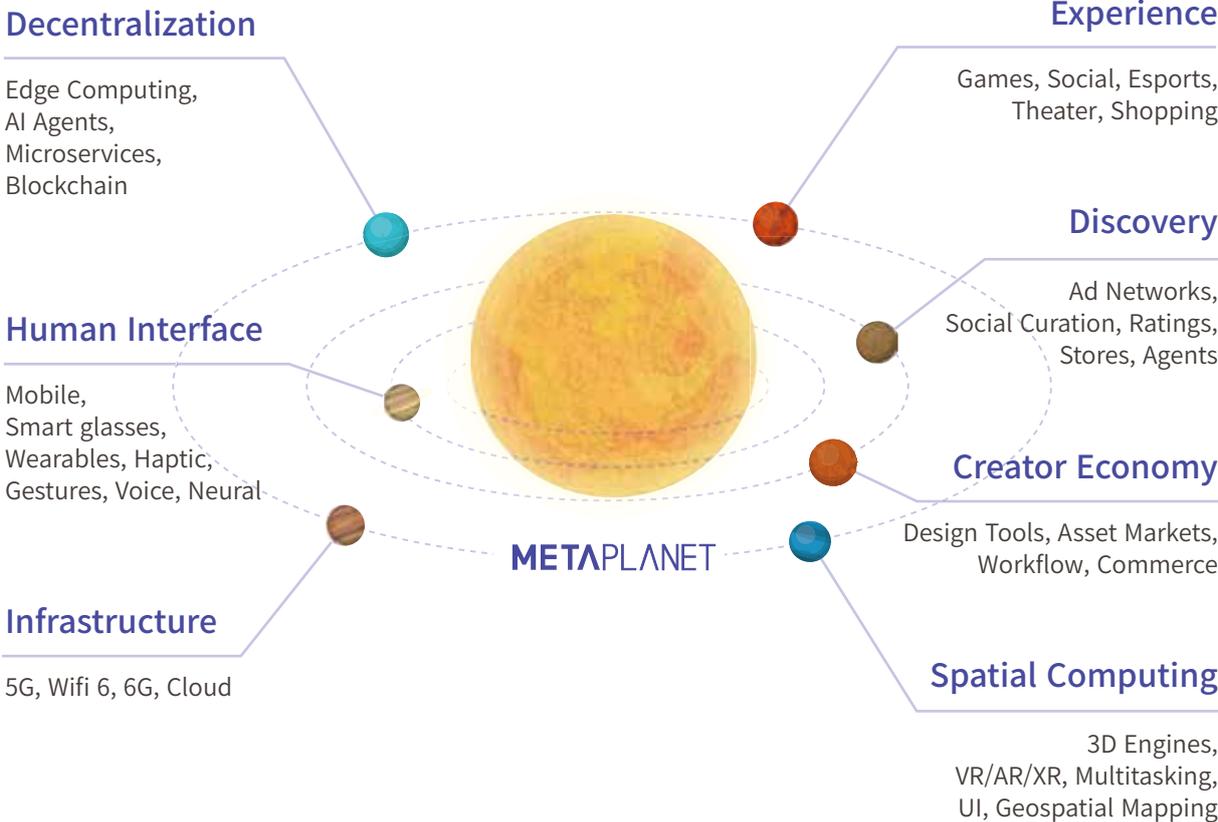
In addition to the game IPs of various genres, Metaplanet is planning to secure IP for cultural contents such as characters, movies, animations, and webtoons through domestic and foreign partners, starting with game IPs. By jointly owning secondary and tertiary works for each IP, it will grow into a global blockchain platform.

Securing IP   **P2E**
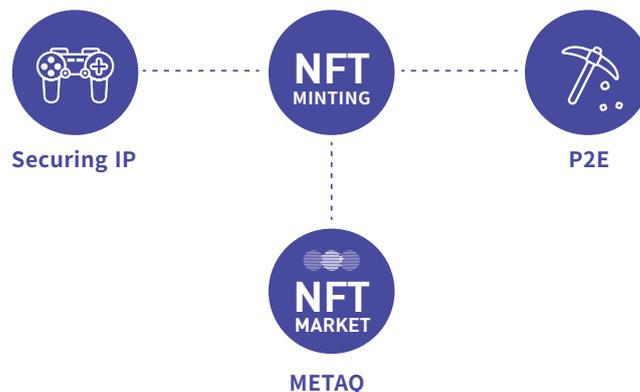
METAQ

4. METAQ Platform

The METAQ Platform is centered on Metaplanet's own mainnet Meta Cube, which is a decentralized network serving as a hub that enables services in various industrial fields by combining virtual reality metaverse and blockchain technology. It plays a role in composing an ecosystem by making entertainment elements such as games, shopping, and social media work in conjunction with the virtual economy.

The goal of METAQ Platform is to maintain the active activities of various ecosystem members, including users and various companies and developers by expanding the network, starting with IP-based NFT games.

Decentralization

Edge Computing,
AI Agents,
Microservices,
Blockchain

Human Interface

Mobile,
Smart glasses,
Wearables, Haptic,
Gestures, Voice, Neural

Infrastructure

5G, Wifi 6, 6G, Cloud

Experience

Games, Social, Esports,
Theater, Shopping

Discovery

Ad Networks,
Social Curation, Ratings,
Stores, Agents

Creator Economy

Design Tools, Asset Markets,
Workflow, Commerce

Spatial Computing

3D Engines,
VR/AR/XR, Multitasking,
UI, Geospatial Mapping

METAPLANET

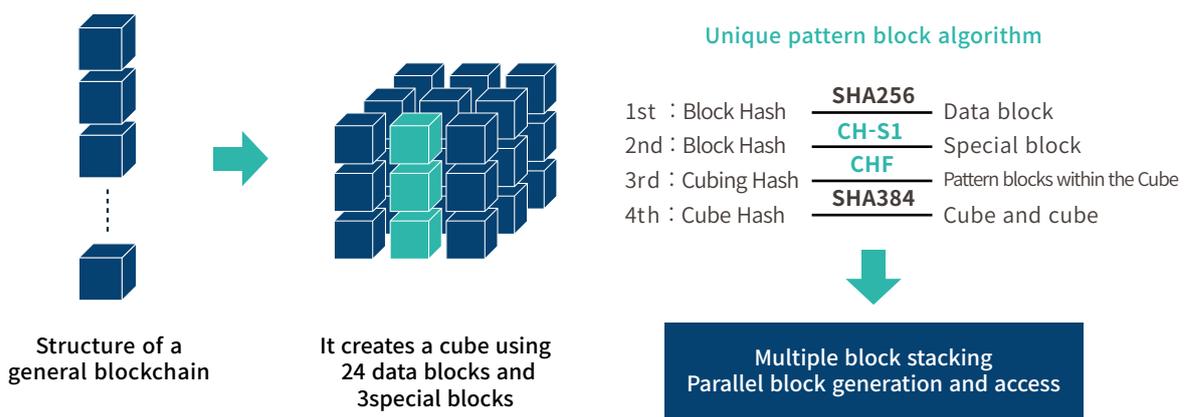| METAQ Platform |

5. Meta Cube

Why was it developed on the mainnet?

There are several problems in creating a platform with the existing mainnet. The nature of the game essentially requires to quickly process transactions that occur at the same time, but if the mainnet such as Ethereum is used, which is what is being widely used today, is difficult to smoothly progress the game. It is also costly. For this reason, we developed Meta Cube, a blockchain mainnet specialized for games. With the current speed of about 10,000 TPS, it is possible to create 10,000 items at the same time, which makes it possible to achieve a smooth speed that does not interfere with gameplay. Also the fee can be freely set and used, so there's absolutely no burden for fees. Above all, when using the mainnet of other blockchains (e.g., Ethereum, EOS, etc.), there are restrictions on the implementation of essential functions for the game, but when using Meta Cube, it is easy to solve problems, so customized development is possible and high scalability can have.

Characteristic

CMP（Cubing Multiprocessing)

Cubing refers to a cubing technology that makes 27 blocks into one cube by parallel processing. The 24 general blocks and 3 special blocks that record the transaction book are combined to create one cube. It is not a simple grid concept, but a technology in which blocks are created simultaneously in parallel. As soon as 27 blocks are created, cubing proceeds, and the created cube is linked with the previous cube to create a hash value.
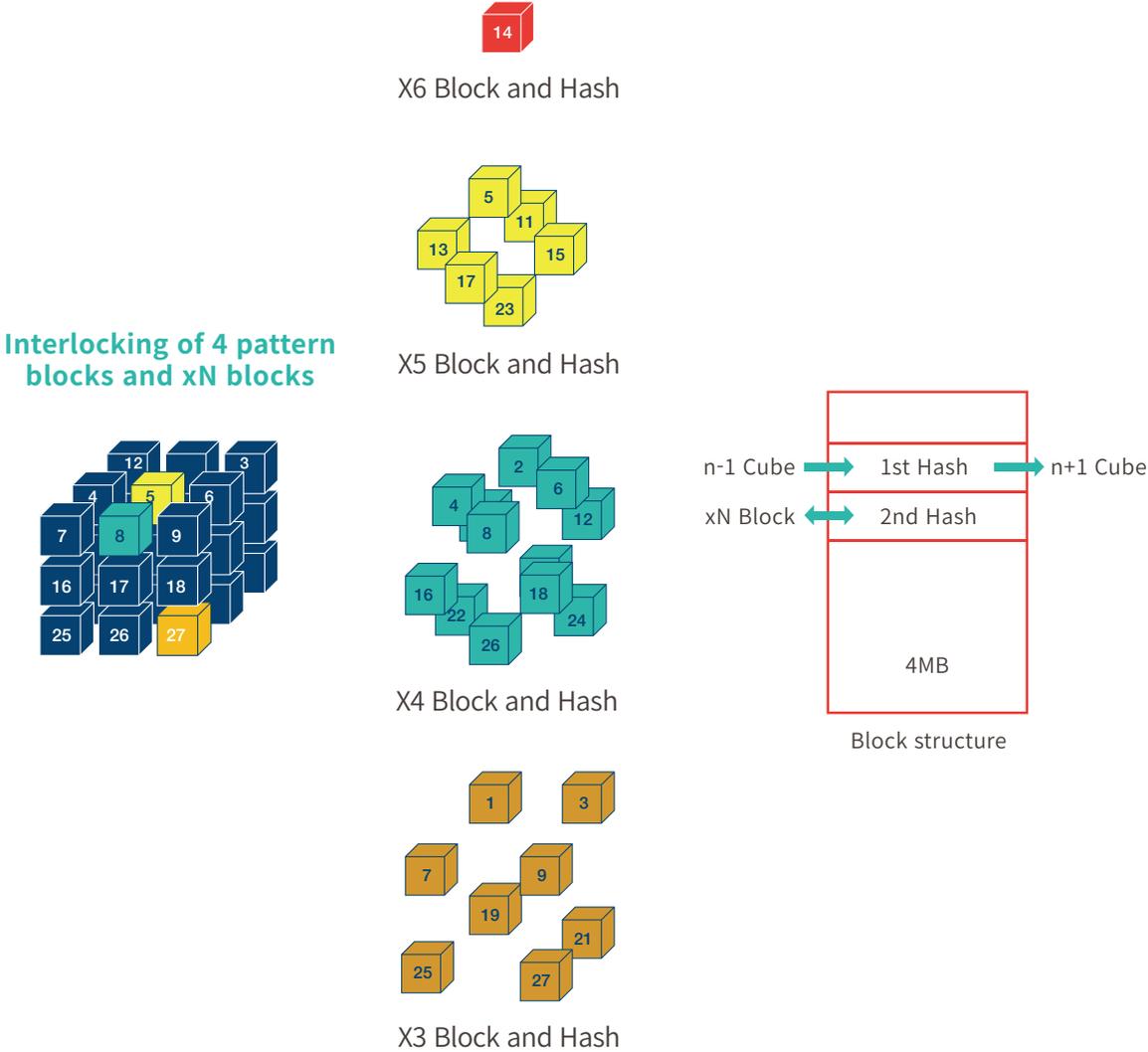

Structure of a general blockchain

It creates a cube using 24 data blocks and 3 special blocks

Unique pattern block algorithm

1st：Block Hash	SHA256	Data block
2nd：Block Hash	CH-S1	Special block
3rd：Cubing Hash	CHF	Pattern blocks within the Cube
4th：Cube Hash	SHA384	Cube and cube

Multiple block stacking
Parallel block generation and access

[Figure 1]

Meta Cube is a fast and secure creation of data blocks in a parallel structure through 24 transaction pools. 24 data blocks generated simultaneously from the transaction pool are routed to cubing, enabling fast and secure processing. It manages parallel processing of large amounts of data blocks through a technology called cubing, and is designed to implement fast access between blocks through a double hash function and pattern block structure.

When blocks are combined into 1 cube, 4 hash functions are used to enhance security. The hash functions used here are SHA256, CH-S2,CHF2, SHA384, and SHA256 and SHA384 are public hash algorithms. CH-S1 (CubeHash Special Version 2) is a self-developed algorithm used to create a hash function when a special block is created. CHF (CubeHash Function Version 2) is a self-developed algorithm used to create a hash function with pattern blocks in the process of cubing.
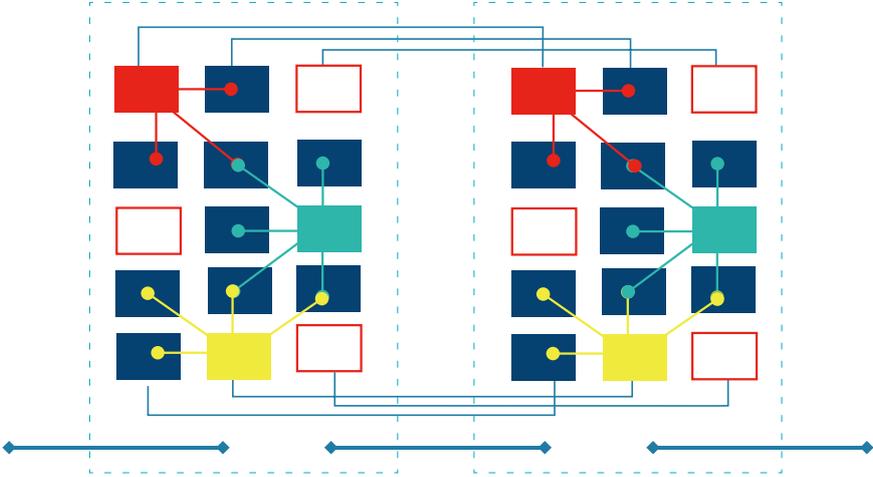
Structural decomposition and explanation

Meta Cube improves data consistency and speed through parallel block creation and multiple block loading.

X6 Block and Hash

X5 Block and Hash

Interlocking of 4 pattern blocks and xN blocks

X4 Block and Hash

X3 Block and Hash

Block structure

[Figure 2]

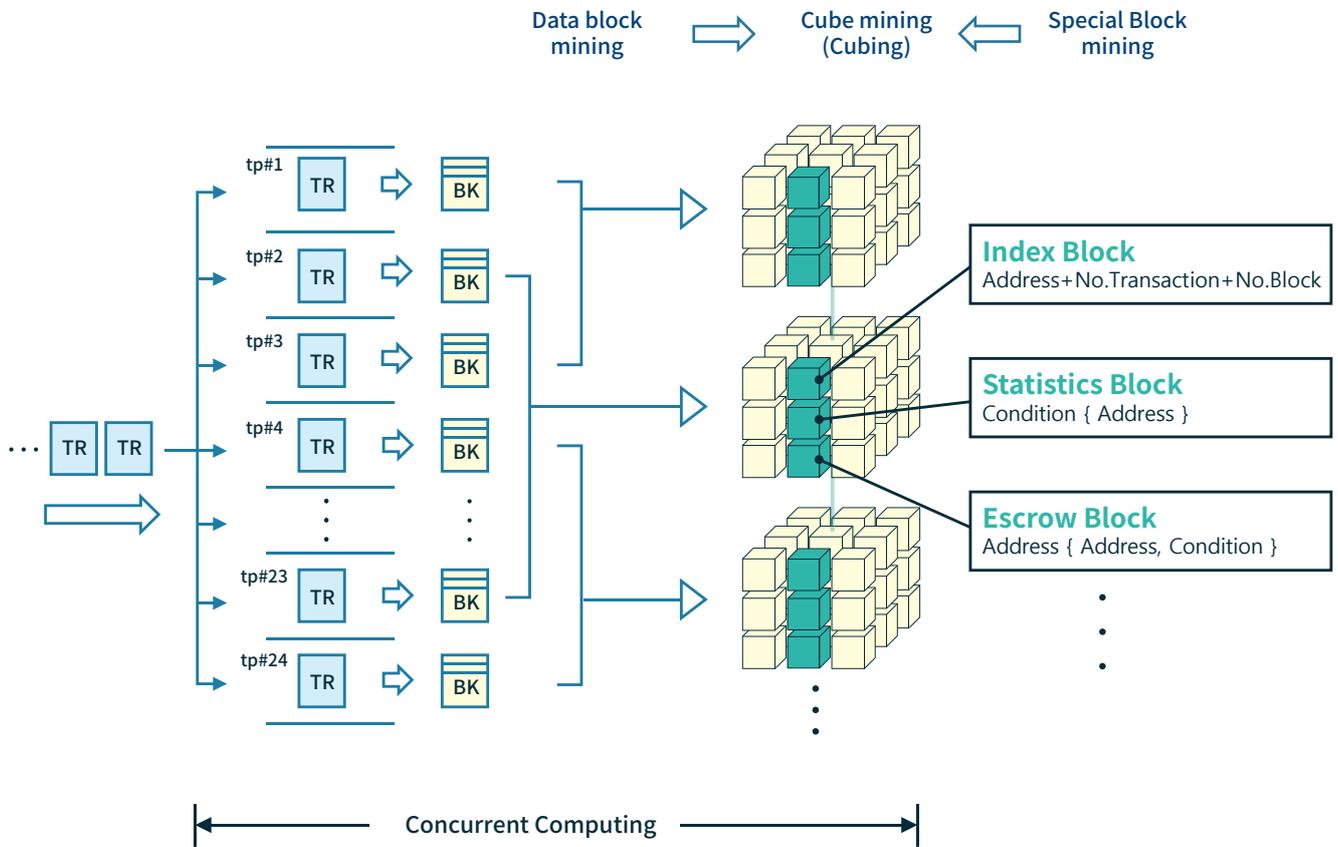When the cube is disassembled, there are 4 block patterns as above.

[Figure 3]

Each pattern block is connected with the nearest block of the previous cube, and the hash value of xN blocks is stored in the 2nd Hash of [Figure 2]. Cube connection from cubing is connected to the cube created just before, because the hash value of the cube created just before is stored in the 1st Hash in [Figure 2]. This connects each block to a block, and a cube to a cube, and the hash value of the blocks connected by each pattern is stored in the cube.
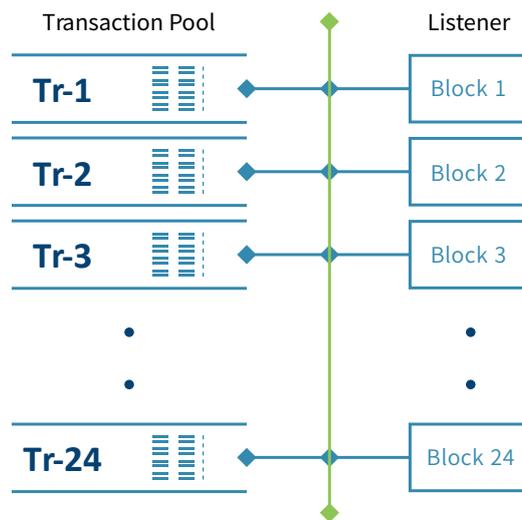
The process from data arrival to transaction pool to cube creation

When transaction history or other information arrives in the transaction pool (multiple types of input data can exist), data from Tr1 to Tr24 are allocated sequentially from the transaction pool to create a general block. A special block is created preferentially by copying the special block of the previous cube at the same time as the previous cube is created.

| Parallel Processing for TPS, Block Generation, Confirmation |

Data block mining ⟹ **Cube mining (Cubing)** ⟸ **Special Block mining**

tp#1 TR ⟹ BK

tp#2 TR ⟹ BK

tp#3 TR ⟹ BK

tp#4 TR ⟹ BK

⋯ TR TR

tp#23 TR ⟹ BK

tp#24 TR ⟹ BK

Index Block
Address+No.Transaction+No.Block

Statistics Block
Condition { Address }

Escrow Block
Address { Address, Condition }

Concurrent Computing

[Figure 4]

Transaction Pool   Listener

Tr-1   Block 1

Tr-2   Block 2

Tr-3   Block 3

Tr-24   Block 24

[Figure 5]

The data of entering the transaction pool comes in block order. 1 transaction is allocated to 1 block, and after being allocated to the 24th block, it is allocated in a circular manner to the 1st block and parallel processing is performed.

Block hash function

The hash function is a function that converts data into a hash value of a fixed length and outputs it. This transformed data is not decrypted to recover the original data, but is used to verify the integrity of the data or to authenticate the password. In the blockchain, the hash value of the nth block is linked with the hash value of the n-1th block. Metacube creates a hash value of each of the 27 blocks in the block, and the hash function used for the data block at this time uses SHA-256. When creating special blocks, self-developed CH-S1 (CubeHash Special Version 2) was used, and this hash function with improved speed so that there was no delay in consideration of the speed of the entire cubing process.

Cubing hash function

When cubing is performed, an independently developed CHF-Algorism (Cubing Hash Function Algorithm) is used for the encryption method. The 27 blocks in the cube have different adjacent blocks depending on the location of each block. According to the position of each face of the cube, it consists of 8 blocks located at the corners, 6 blocks located at the center, 12 blocks surrounding the center, and 1 block at the center of the cube, and an accordingly modified hash function is used.

Cube hash function

It generates a hash value of the current cube including the total hash value of 27 blocks obtained from cubing and the hash value of the previous cube. The SHA-384 function is used to create a hash value of the cube.

Advantages

To summarize briefly the advantages of Meta Cube, because it is a parallel processing structure differentiated from the structure of the existing blockchain mainnet, it has excellent performance in terms of bandwidth expandability. By comparison, it is like extending a one-lane highway to 24 lanes. It has a high level of security by using 4 types of hash functions. As an analogy, you can think of using 4 different types of locks instead of using one.

By having the flexibility to classify data types, store and manage them, 24 data blocks can contain specific data depending on the intended use. Efficiency can be increased by configuring and designing various data for different purposes, such as using block 1 for fishing games, block 2 for golf games, and block 3 for board games. In addition, you can use the NFT option special block that can contain enchantment items by using 3 special blocks. By developing an API that can be used by linking wallets, NFT and tokens within the game, it has compatibility that can be easily applied in-game by game companies. Meta Cube has been developed to a level that can present a next-generation model with innovative technology development block chain from design to code for these various functions.

6. Token economy

METAQ is the utility token used and circulated for NFT purchases, items, and staking, which are common on the METAQ platform. Free and stable transactions can be conducted without a third-party intermediary, and while enjoying various types of content on the platform, users can acquire METAQ tokens in the form of rewards or revenue generation. Based on this process, the ecosystem and platform are flexibly expanded, allowing an active consumption of various contents to allow the METAQ token to have a virtuous cycle.
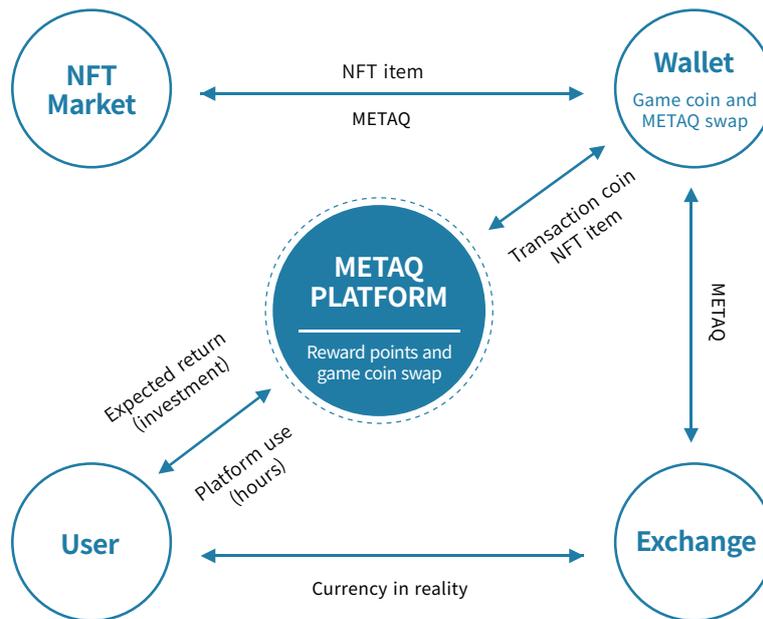
7. Content architecture

It maximizes business feasibility by constructing a creative architecture with an independent development process for each solidly processed content.
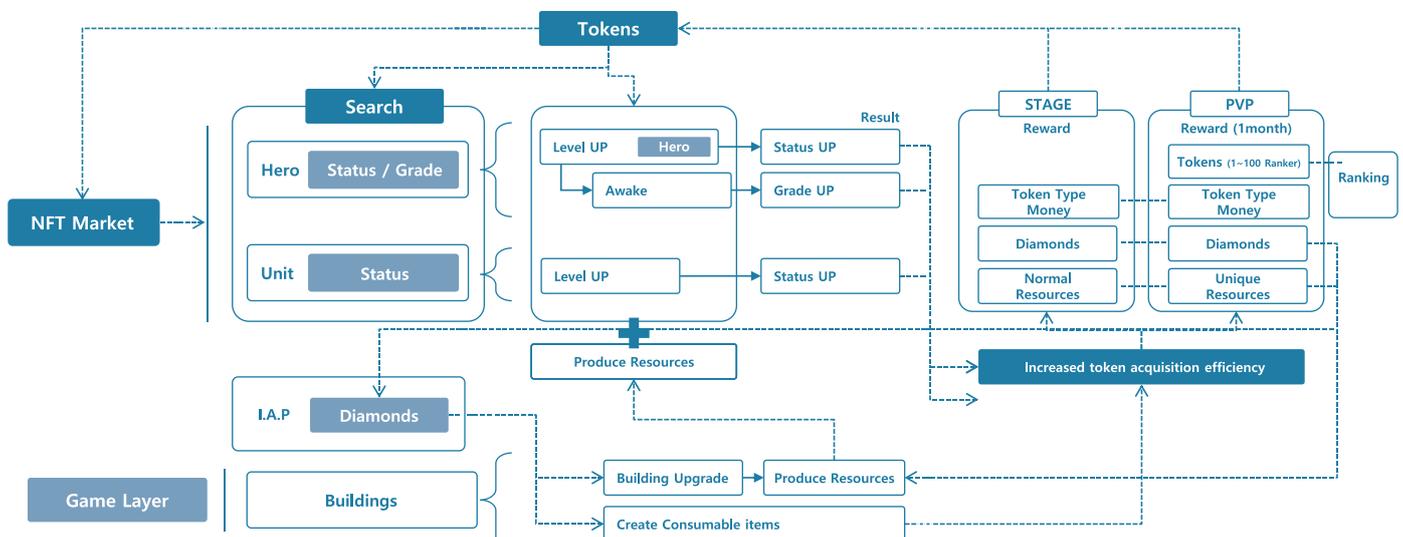
8. Game introduction

CRYPTO FISHING

Crypto Fishing is an easy-to-access global fishing game that allows you to enjoy more colorful graphics using real fish species images and data, and offers thrilling and realistic play even with a simple interface and simple operation.

> With more than 100 kinds of NFT fish, you can use various mining reward systems in the game, and support NFT fish trading with others.

NFT

Token Economy
· NFT item trading
· Mining reward system

Mining System
· Rewards by fish type and grade

Aquarium
· Turning into NFT forspecific fish species through fostering

Ranking
· Ranking competition system
· Catching the largest fish / Catching the most fish / Catching target fish

FISH
· More than 100 real-life fish species
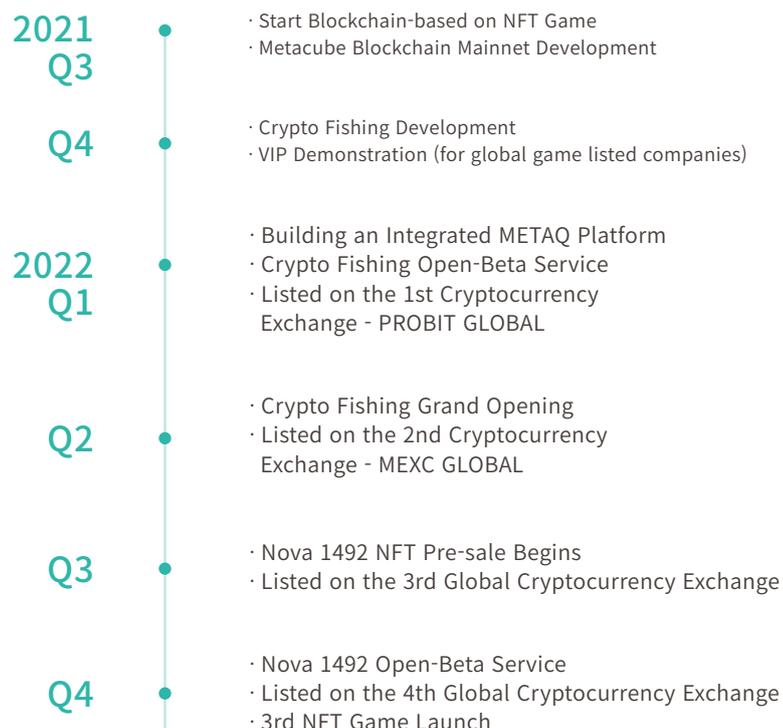
9. Future plans and lineup

Starting with the global launch of crypto phishing in 2022, contracts for a number of verified IPs have been completed. As we are receiving partnership proposals from multiple developers, we plan to launch at least two games every quarter.
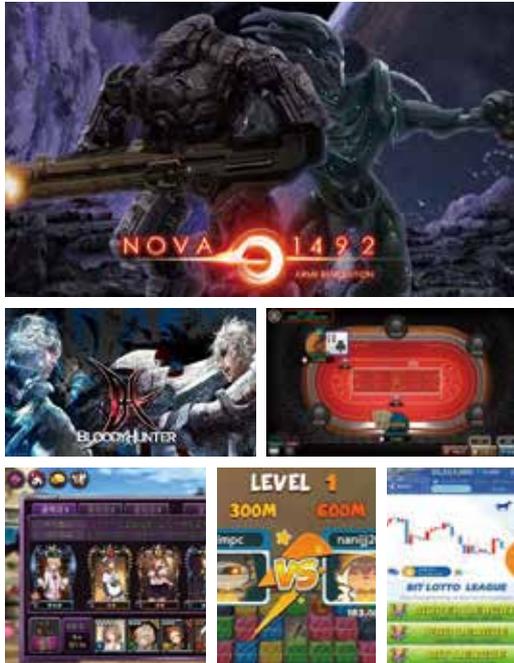
No.	Title	Genre	Platform
1	Black Jack	Board game	Mobile/PC/HTML5
2	In Bit Win	Board game	Mobile/PC/HTML5
3	Holdem	Board game	Mobile/PC/HTML5
4	capsa	Board game	Mobile/PC/HTML5
5	Vindar Cime	Board game	Mobile/PC/HTML5
6	Bit Lotto	Board game	Mobile/PC/HTML5
7	Puzzle hero	3D puzzle	Mobile/PC
8	Ghost Hunter	Idle game	Mobile/PC/HTML5
9	Astral War	TCG	Mobile
10	Bloody Hunter	MORPG	PC/STEAM
11	NOVA1492	RTS	PC/STEAM

*The order of the above titles is independent of the order of release.

10. Roadmap

2021 Q3
· Start Blockchain-based on NFT Game
· Metacube Blockchain Mainnet Development

Q4
· Crypto Fishing Development
· VIP Demonstration (for global game listed companies)

2022 Q1
· Building an Integrated METAQ Platform
· Crypto Fishing Open-Beta Service
· Listed on the 1st Cryptocurrency
  Exchange - PROBIT GLOBAL

Q2
· Crypto Fishing Grand Opening
· Listed on the 2nd Cryptocurrency
  Exchange - MEXC GLOBAL

Q3
· Nova 1492 NFT Pre-sale Begins
· Listed on the 3rd Global Cryptocurrency Exchange

Q4
· Nova 1492 Open-Beta Service
· Listed on the 4th Global Cryptocurrency Exchange
· 3rd NFT Game Launch

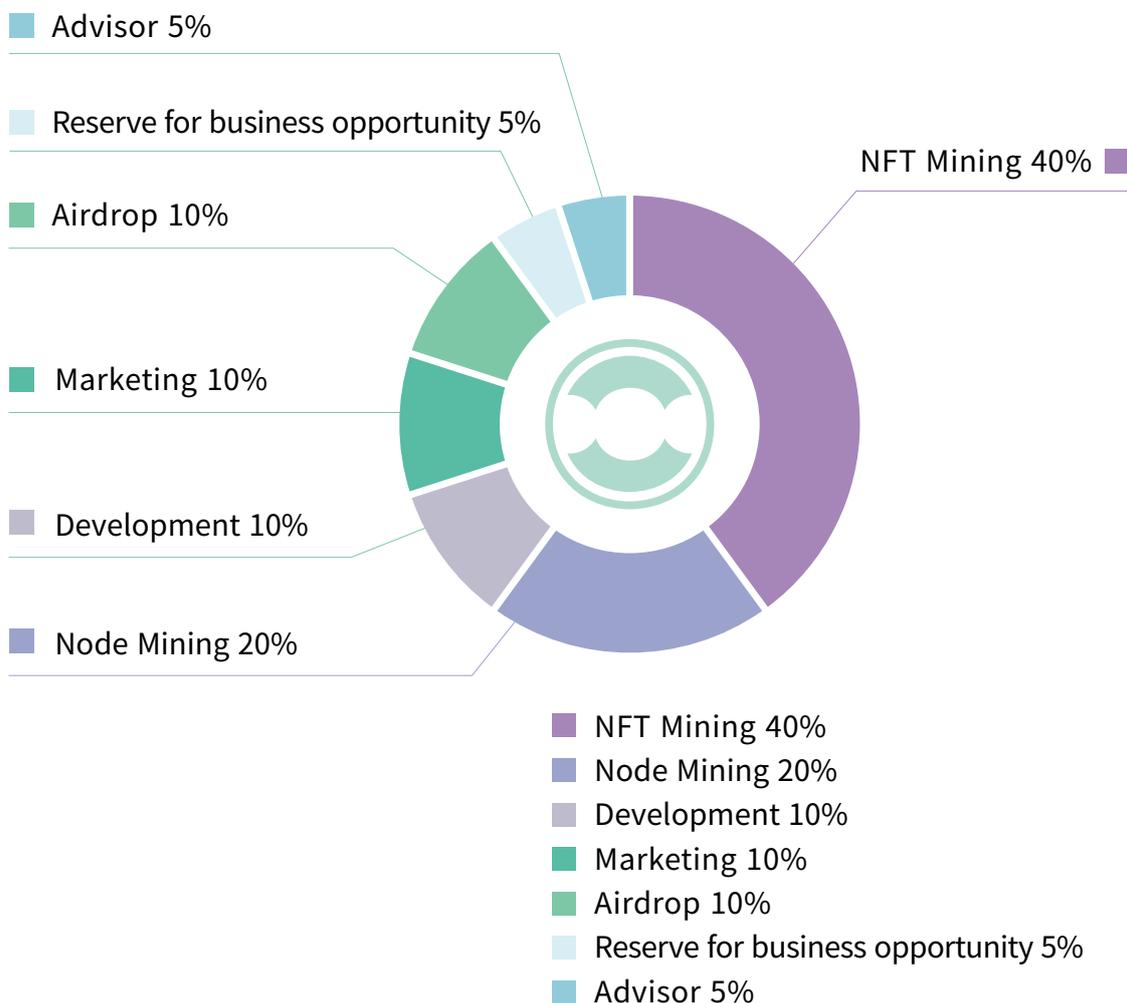# 11. Token Matrix

Platform Maker

As a governance participant, the user can receive USDT+Token support through Metaplanet and on-chain cooperation contracts. In addition, by providing tokens to users through games to increase the user pool, as the ecosystem grows, it shares its profits and is an important member of the token ecosystem.

Player(User)

As a participant in the game or token ecosystem, you can receive a certain amount of compensation from Platform Maker's Platform. Rewarded tokens can participate in voting by METAQ Dapp and are used as governance voting and Game Maker. It is stored and released as a new wallet every quarter, and it is locked until voting is completed.

⟳ METAQ Token

A total of 1 billion METAQ tokens will be issued over 10 years. METAQ tokens are listed on the exchange, and tokens generated for each type of content are swapped at a certain rate by reflecting changes in market conditions.

Advisor 5%
Reserve for business opportunity 5%
Airdrop 10%
Marketing 10%
Development 10%
Node Mining 20%
NFT Mining 40%

- NFT Mining 40%
- Node Mining 20%
- Development 10%
- Marketing 10%
- Airdrop 10%
- Reserve for business opportunity 5%
- Advisor 5%

12. Team

Executives

・CEO, JeongYeop Shin: NCsoft (Lineage, Guild War), Smilegate (MNC)
・Co-CEO, JiYoon Kim: Game Academy, EDU Holdings, Aurora (listed company), Game Business Expert

Core developers

Name	Position	Participation project
Youngjun Heo	Game Development Director	Smilegate (MNC), Cheongpung Myeongwol (Neowiz), NOVA1492
Yongwoon Kim	Blockchain Development Director	Development of NFT Cubechain mainnet, launch of NFT smart contract (ERC-721)
Kyungho Park	Planning Team Manager	Smilegate (Sephiroth), King of Fishing Fishing, Cheongpung Myeongwol (Neowiz), NOVA1492
Jongheon Seol	Server team leader	Masangsoft (Ace Online), Cheongpung Myeongwol (Neowiz), NOVA1492
Taeho Kim	Art director	Gravity (Ragnarok, Requiem), Sono V (Shia, Yongcheongi)

Escape clause

METAPLANET

http://metaplanet.co.kr